New Bedford Harbor Superfund Site emails in response to your FOIA request

David Peterson to: ggill-austern 08/31/2010 04:41 PM

Cc: mryan, Dave Dickerson, Cynthia Catri, ManChak Ng, Maximilian Boal, Cristeen Schena

Follow Up: Normal Priority.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
5 POST OFFICE SQUARE, SUITE 100
BOSTON, MASSACHUSETTS 02109

Delivered by E-Mail

31 August 2010

Gary L. Gill-Austern
Nutter, McClennen & Fish LLP
Seaport West
155 Seaport Boulevard
Boston, MA 02210-2604

Dear Mr. Gill-Austern

Enclosed are 16 sets of e-mails, with attachments, produced in response to a Freedom of Information Act (FOIA) request made by you on July 28, 2010, regarding the New Bedford Harbor Superfund Site. EPA is continuing to review its records to determine if other documents may be responsive to your request. We have a telephone call scheduled with you tomorrow, September 1, 2011, to discuss refining the scope of your information request and developing a schedule for EPA's identification, review, and production of additional records that may be responsive.

As stated in a letter that you sent EPA on August 12, 2010, it is acknowledged that one of the purposes of your FOIA request was to assist in settlement negotiations and therefore these documents are subject to a confidentiality agreement entered into between your client AVX and the United States on July 11, 2008. Please note that all

documents that contain Confidential Business Information have been separated, labeled, and sent via a separate e-mail.

If you have any questions about these documents, please contact me.

Sincerely,

David Peterson
Senior Enforcement Counsel
(617) 918-1891

cc:

Cynthia E. Catri, Esq.
David Dickerson
Christine Schena
Mary K. Ryan, Esq.

E-Mail #1

From:	"Rigassio-Smith, Anita" <Anita.Rigassio-Smith@jacobs.com>
To:	Dave Dickerson/R1/USEPA/US@EPA
Date:	06/15/2010 08:24 AM
Subject:	RE: ESD cost estimates

-----Original Message-----
From: dickerson.dave@epamail.epa.gov [mailto:dickerson.dave@epamail.epa.gov]
Sent: Monday, June 14, 2010 4:03 PM
To: Rigassio-Smith, Anita
Cc: Fox, Steve (New Bedford); Mark.J.Anderson.Jr@usace.army.mil; paul.g.l'heureux@usace.army.mil; Maryellen.Iorio@usace.army.mil
Subject: ESD cost estimates

Anita - thanks for sending all the cost info up with Elaine. Could you forward the "Assumptions for ESD Cost Alternatives" via email as a Word file? I'll pass the final edits I make past all of you to make sure you're OK with them. But I'll need a quick turnaround once I do that. Thanks - Dave

Assumptions for ESD Cost Estimates_Rev9.doc

E-Mail #2

From:	"Rigassio-Smith, Anita" <Anita.Rigassio-Smith@jacobs.com>
To:	Dave Dickerson/R1/USEPA/US@EPA
Date:	03/08/2010 06:52 PM
Subject:	RE: Assumptions narrative

-----Original Message-----
From: dickerson.dave@epamail.epa.gov [mailto:dickerson.dave@epamail.epa.gov]
Sent: Monday, March 08, 2010 4:43 PM
To: Rigassio-Smith, Anita
Subject: Assumptions narrative

Hi Anita - when you get a minute could you send me the word file for the "ASSUMPTIONS FOR ESD COST ESTIMATES"? It'll be easier for me to make the edits in track changes than to list them as comments. Thanks - Dave

Assumptionsfor ESD Cost Estimates_Rev7.doc

E-Mail #3

From:	"Rigassio-Smith, Anita" <Anita.Rigassio-Smith@jacobs.com>
To:	Dave Dickerson/R1/USEPA/US@EPA
Date:	03/02/2010 09:51 AM
Subject:	RE: comments on ESD Alternative #1, $80m/yr

Thanks Dave. In the mean time the answers to your two questions yesterday evening are as follows:

Question 1) Check the unit cost for T&D is correct for CY and not TONS.
Answer 1) While the CY unit rate was an actual it was derived in September '09, and varied throughout the season. I will change it (it actually went down) for the next version to reflect the average 2009 rate.

Question 2) Check the $80M version of Alt 2 for stockpiling material for the CDFs, and do you have the most current version.
Answer 2) Yes, you do have the most current version of the estimate. After you brought up this question on 10/29/09, I looked into it and discovered that I had 72,460 CY too much going into the CDFs. This alleviates at least one of the stock-piling years. In the next version I plan to increase the rate of building CDFs in project year 1 so that we can fill sooner and then

eliminate the need for stockpiling altogether. The decision was to not make the adjustment at the time so as to continue working on the two $30M estimates.

Hope this helps for now.

Anita

-----Original Message-----
From: dickerson.dave@epamail.epa.gov [mailto:dickerson.dave@epamail.epa.gov]
Sent: Monday, March 01, 2010 5:06 PM
To: Rigassio-Smith, Anita
Cc: Fox, Steve (New Bedford); maurice.beaudoin@usace.army.mil; Robert.A.Leitch@usace.army.mil; Anderson.Mark@epamail.epa.gov; paul.g.l'heureux@usace.army.mil; Maryellen.Iorio@usace.army.mil; Catri.Cynthia@epamail.epa.gov; Peterson.David@epamail.epa.gov; Ng.ManChak@epamail.epa.gov; Brill.Larry@epamail.epa.gov; Falvey.Jeanethe@epamail.epa.gov; stanley.elainet@epamail.epa.gov; White.Kimberly@epamail.epa.gov; Renahan.Kate@epamail.epa.gov
Subject: comments on ESD Alternative #1, $80m/yr

Hi Anita - here's the first set of comments in case you can start in on the revisions prior to receiving the comments on the other 5 cost estimates.

Dave

(See attached file: esd.cost.est.alt1.$80.310.doc)

E-Mail #4

From:	"Rigassio-Smith, Anita" <Anita.Rigassio-Smith@jacobs.com>
To:	Dave Dickerson/R1/USEPA/US@EPA, ElaineT Stanley/R1/USEPA/US@EPA, "L'Heureux, Paul G NAE" <Paul.G.L'Heureux@usace.army.mil>, <mark.j.otis@nae02.usace.army.mil>
Cc:	"Fox, Steve \(New Bedford\)" <Steve.Fox@jacobs.com>, "Connor, Jackie" <Jackie.Connor@jacobs.com>, "Document Control - Bourne-New Bedford" <DocumentControl-Bourne-NewBedford@jacobs.com>
Date:	12/08/2009 02:55 PM
Subject:	ESD Alternative 2 $30M with Annual Escalated Costs

The attached file, *Alt2 30M Estimate Dec09* , is the assumptions and cost estimate for Alternative 2 of the ESD with a $30M/year funding scenario. Similar to the Alternative 1 $30M estimate, the costs have been escalated annually at a rate of 3.5%, but the annual funding remains constant.

Feel free to call me or e-mail me with any questions.

Anita


Alt2 30M Transmittal.pdf [C.B.I. document moved to separate file - Alt2 30 M Estimate Dec09.pdf]

E-Mail #5

From:	"Rigassio-Smith, Anita" <Anita.Rigassio-Smith@jacobs.com>
To:	Dave Dickerson/R1/USEPA/US@EPA, ElaineT Stanley/R1/USEPA/US@EPA, "L'Heureux, Paul G NAE" <Paul.G.L'Heureux@usace.army.mil>, <mark.j.otis@nae02.usace.army.mil>
Cc:	"Fox, Steve \(New Bedford\)" <Steve.Fox@jacobs.com>, "Document Control - Bourne-New Bedford" <DocumentControl-Bourne-NewBedford@jacobs.com>, "Connor, Jackie" <Jackie.Connor@jacobs.com>
Date:	11/18/2009 04:26 PM
Subject:	ESD Alternative 1 $30M with Annual Escalated Costs

The attached file is the assumptions and cost estimate for Alternative 1 of the ESD with a $30M/year funding scenario. Per Dave's direction, the costs have been escalated annually at a rate of 3.5%, but the annual funding remains constant.

At roughly half way through the project lifetime, the annual escalated costs exceed $30M; this is necessary to maintain a minimum of 39 days of hydraulic dredging or a reasonable number of days of field work (e.g., wetlands restoration) each year.

Feel free to call me or e-mail me with any questions.

Anita

 Alt1 30M Transmittal.pdf [C.B.I. document moved to separate file - "Alt1 30M Estimate Nov09.pdf"]

E-Mail #6

From:	"Rigassio-Smith, Anita" <Anita.Rigassio-Smith@jacobs.com>
To:	Dave Dickerson/R1/USEPA/US@EPA, ElaineT Stanley/R1/USEPA/US@EPA, <mark.j.otis@nae02.usace.army.mil>, "L'Heureux, Paul G NAE" <Paul.G.L'Heureux@usace.army.mil>, "Fox, Steve \(New Bedford\)" <Steve.Fox@jacobs.com>, "Connor, Jackie" <Jackie.Connor@jacobs.com>, "Document Control - Bourne-New Bedford" <DocumentControl-Bourne-NewBedford@jacobs.com>
Date:	09/11/2009 03:09 PM
Subject:	Draft 2009 ESD for LHCC Cost Estimates: $15M and $80M

Please find attached the following files for the 2009 ESD for LHCC Cost Estimates:

1. Transmittal Page
2. Assumptions for ESD Cost Estimates
3. Alternative 1 $15M/Year Cost Estimate
4. Alternative 1 $80M/Year Cost Estimate
5. Alternative 2 $15M/Year Cost Estimate

6. Alternative 2 $80M/Year Cost Estimate

The $30M/Year scenarios will follow shortly.

If you have any problems with this transmittal, please let me know.

Anita


Draft 2009 ESD 15-80 Transmittal.pdf

Assumptions for ESD Cost Estimates_Rev1.pdf [C.B.I Document moved to a separate file - "ESD Alt 1 15M Rev1.pdf"] [C.B.I. Document moved to a separate file "ESD Alt 1 80M Rev1.pdf"] [C.B.I. Document moved to a separate file - "ESD Alt 2 15M Rev1.pdf"] [C.B.I. Document moved to a separate file - "ESD Alt 2 80M Rev1.pdf"]

E-Mail #7

From:	"Rigassio-Smith, Anita" <Anita.Rigassio-Smith@jacobs.com>
To:	Dave Dickerson/R1/USEPA/US@EPA
Cc:	"Fox, Steve \(New Bedford\)" <Steve.Fox@jacobs.com>, <paul.g.l'heureux@usace.army.mil>
Date:	07/15/2009 03:59 PM
Subject:	ESD Alt 1 ROM for 7/16/09

Dave,

Attached is the ROM with the numbers we discussed this morning. Good luck tomorrow.

Anita

[C.B.I. moved to a separate file - "ESD Alt 1 ROM.pdf"]

E-Mail #8

From:	"Fox, Steve (New Bedford)" <Steve.Fox@jacobs.com>
To:	Dave Dickerson/R1/USEPA/US@EPA
Date:	03/31/2010 10:18 AM
Subject:	Clean Electronic Version of Lower Harbor CAD cell report

Hi Dave,

As requested, please find attached the clean electronic copy of the CAD cell air report.

Thanks,

Steve

lhcc.air.model NAE Included-revised-with-correction-comments REV 9 CLEAN 2.doc

E-Mail #9

From:	"Fox, Steve \(New Bedford\)" <Steve.Fox@jacobs.com>
To:	Dave Dickerson/R1/USEPA/US@EPA
Cc:	<Mark.J.Otis@usace.army.mil>, <maurice.beaudoin@usace.army.mil>, <Robert.A.Leitch@usace.army.mil>, <paul.g.l'heureux@usace.army.mil>, <Maryellen.Iorio@usace.army.mil>
Date:	01/05/2010 10:21 AM
Subject:	RE: LHCC Air Modeling Report

Hi Dave,

Happy New Year to you as well. Please find attached the word version of the LHCC Air Modeling Report for your red-line strike comments.

I also just talked to our modeler. He said that it will be no problem in terms of modeling the mechanical off loading of the material. He will also be able to meet the end of February deadline for both the modeling and finalization of the report.

Thanks,

Steve

-----Original Message-----
From: dickerson.dave@epamail.epa.gov [mailto:dickerson.dave@epamail.epa.gov]
Sent: Tuesday, January 05, 2010 9:41 AM
To: Fox, Steve (New Bedford)
Cc: Mark.J.Otis@usace.army.mil; maurice.beaudoin@usace.army.mil;

Robert.A.Leitch@usace.army.mil; paul.g.l'heureux@usace.army.mil;
Maryellen.Iorio@usace.army.mil
Subject: LHCC Air Modeling Report

Hi Steve - happy new year. I've completed my review of the air modeling report and was hoping you could forward me the Word file to streamline the comment process.

Also, it appears that only split hull scows were evaluated in this modeling. We need to add an evaluation of bucket unloading as well, as this could potentially have greater impacts on air quality (provided this can be completed by, say, end of February).

Thanks - Dave

NBH-2009-CAD-air-modeling-report-Rev 08-DD-cmts.doc

E-Mail #10

From:	"Fox, Steve \(New Bedford\)" <Steve.Fox@jacobs.com>
To:	Dave Dickerson/R1/USEPA/US@EPA
Date:	07/15/2009 09:06 AM
Subject:	FW: LHCDF air modeling assumption and scenarios

Hi Dave,

Please find attached the assumptions that I had Changsheng pull together based upon the ERDC modeling information and assumptions.

Thanks,

Steve

-----Original Message-----
From: Lu, Changsheng
Sent: Tuesday, July 14, 2009 4:04 PM
To: Fox, Steve (New Bedford)
Subject: LHCDF air modeling assumption and scenarios

Steve,

Here are the info I put together for the modeling effort. I think we miss the info on cell size (not that important since it is mostly a near point source in the model). The main thing is the dredging and disposing length. Hope you and Anita can provide the length based on dredging volumes. For 3-year scenario, it is about 110000 cy/year. For 5-year scenario, it is about 70000 cy/year.

Please call or email me if you have any questions.

Changsheng

-----Original Message-----

From: Fox, Steve (New Bedford)
Sent: Thursday, July 09, 2009 9:29 AM
To: Lu, Changsheng
Subject: FW: Mean Constituents by Lift/Year

FYI, I will give you a call.

Thanks,

Steve

-----Original Message-----
From: Leitch, Robert A NAE [mailto:Robert.A.Leitch@usace.army.mil]
Sent: Wednesday, July 01, 2009 11:37 AM
To: Fox, Steve (New Bedford)
Subject: FW: Mean Constituents by Lift/Year

-----Original Message-----
From: Fredette, Thomas J NAE
Sent: Wednesday, July 30, 2008 11:56 AM
To: Leitch, Robert A NAE; Schroeder, Paul R ERDC-EL-MS; Ruiz, Carlos E ERDC-EL-MS; Mitkevicius, K C NAE; 'dickerson.dave@epamail.epa.gov'
Subject: Mean Constituents by Lift/Year

The attached pdf file contains a summary of an analysis I did looking at the estimated mean concentration of Total PCB, Cu, Silt/Clay, and TOC under both a 3-lift and 5-lift scenario for the Upper Harbor CAD cell. That analysis was done using a straight average of the DMU constituent values within each lift and also, for PCBs, computing a DMU-volume weighted average (last column of table). The table also includes average values for the Lower Harbor CAD cell under a 2-lift scenario.

A caveat: My total volume numbers do not precisely match an estimate of volume Dave recently provided to me (28 July), but they do come close to the original estimate on the first tab of the attached spreadsheet (provided sometime earlier by Dave). Nonetheless, I think for the purposes of this analysis slight differences in volumes (Upper Harbor estimate 345,000 vs. 403,000) won't make a substantial difference.

The 5-lift and 3-lift non-weighted averages show similar ranges for the various constituents with the 5-lift scenario showing an intermediate PCB value of 889 in lift 2 that is not reflected in the 3-lift scenario (basically in the 5-lift scenario the DMUs of lift 2 contributing to this value get incorporated into lift 1 of the 3-lift scenario).

The PCB weighted average shows general agreement with the non-weighted approach, although lift-2 under both scenarios is somewhat higher in the weighted average calculation (5-lift; 889 vs. 1230: 3-lift; 281 vs. 435).

In general, I believe that this analysis supports a conclusion that modeling of the upper harbor can be done based on three composites. The analysis also suggests that use of a volume weighted average may not provide much additional discrimination. Therefore, I did not conduct that analysis for the other constituents.

I have attached the spreadsheet used to generate the pdf table if anyone wants to dig into the weeds.

In particular, Paul and Carlos should comment on whether they generally concur or whether they think some different analysis of the data would be critical for model input and lift assumptions.

Tom


Proposed LHCDF Air Modeling.pdf

CAD modeling and Disposal Assumptions.pdf

Proposed LHCDF Air Modeling.doc

E-Mail #11

From:	"Schroeder, Paul R ERDC-EL-MS" <Paul.R.Schroeder@usace.army.mil>
To:	Dave Dickerson/R1/USEPA/US@EPA
Cc:	"Hayter, Earl ERDC-CHL-MS" <Earl.Hayter@usace.army.mil>, "Anderson, Mark J Jr NAE" <Mark.J.Anderson.Jr@usace.army.mil>, "Iorio, Maryellen NAE" <Maryellen.Iorio@usace.army.mil>, "Fredette, Thomas ERD" <Thomas.J.Fredette@usace.army.mil>
Date:	05/19/2010 12:00 AM
Subject:	RE: final comments on the NBH CAD cell model report

Dave,

I addressed your comments incorporating your changes except where noted in the comments which contain some clarifications.

Paul

-----Original Message-----
From: dickerson.dave@epamail.epa.gov [mailto:dickerson.dave@epamail.epa.gov]
Sent: Tuesday, May 18, 2010 10:08 AM
To: Schroeder, Paul R ERDC-EL-MS
Cc: Hayter, Earl ERDC-CHL-MS; Anderson, Mark J Jr NAE; Iorio, Maryellen NAE; Fredette, Thomas ERD
Subject: RE: final comments on the NBH CAD cell model report

Paul - I think we're almost done! My (hopefully) final comments are attached. Thanks again to everyone who contributed.

Dave

(See attached file: lhcc.erdc.model.5.18.10.doc)

From: "Schroeder, Paul R ERDC-EL-MS"

<Paul.R.Schroeder@usace.army.mil>

To: Dave Dickerson/R1/USEPA/US@EPA, "Fredette, Thomas ERD" <Thomas.J.Fredette@usace.army.mil>, "Hayter, Earl ERDC-CHL-MS" <Earl.Hayter@usace.army.mil>, "Anderson, Mark J Jr NAE" <Mark.J.Anderson.Jr@usace.army.mil>, "Iorio, Maryellen NAE" <Maryellen.Iorio@usace.army.mil>

Date: 05/15/2010 11:55 PM

Subject: RE: final comments on the NBH CAD cell model report

Dave,

I addressed all of your comments, except the mentioning of activated carbon which I understand that you did not want a control section added. Do you want a statement added to the conclusion #9 that the losses between dredging seasons could be reduced by broadcasting activated carbon? I also added a conclusion regarding acceleration of the placement schedule.

Please check out the changes and then I will finalize the document.

Paul

-----Original Message-----
From: dickerson.dave@epamail.epa.gov [mailto:dickerson.dave@epamail.epa.gov]
Sent: Friday, May 07, 2010 10:24 AM
To: Schroeder, Paul R ERDC-EL-MS; Fredette, Thomas ERD; Hayter, Earl ERDC-CHL-MS; Anderson, Mark J Jr NAE; Iorio, Maryellen NAE
Subject: final comments on the NBH CAD cell model report

Hello - thanks to all involved with this effort. Looks to me like we have a very good product. My relatively few and minor comments are attached in blue text.

My one over-arching comment (repeated in the attachment) is this: the modeling assumes placement over three years, yet our cost estimates are now assuming only one or two years (depending on funding) to fill the cell. Can the report add a short discussion about but what the likely impact would be (i.e., higher or lower losses) if the cell is filled over a shorter time frame - i.e., one or two years?

Thanks again - Dave

p.s. - I'll look over the tables and figures early next week and get any comments on those to you as well)

(See attached file: lhcc.erdc.model.rep.finalreview.doc)
[attachment "Lower Harbor CAD Report May 2010prs.doc" deleted by Dave Dickerson/R1/USEPA/US]

lhcc erdc model 5 18 10 prs.doc

E-Mail #12

From:	"Schroeder, Paul R ERDC-EL-MS" <Paul.R.Schroeder@usace.army.mil>
To:	Dave Dickerson/R1/USEPA/US@EPA, "Fredette, Thomas ERD" <Thomas.J.Fredette@usace.army.mil>, "Hayter, Earl ERDC-CHL-MS" <Earl.Hayter@usace.army.mil>, "Anderson, Mark J Jr NAE" <Mark.J.Anderson.Jr@usace.army.mil>, "Iorio, Maryellen NAE" <Maryellen.Iorio@usace.army.mil>
Date:	05/15/2010 11:55 PM
Subject:	RE: final comments on the NBH CAD cell model report

Dave,

I addressed all of your comments, except the mentioning of activated carbon which I understand that you did not want a control section added. Do you want a statement added to the conclusion #9 that the losses between dredging seasons could be reduced by broadcasting activated carbon? I also added a conclusion regarding acceleration of the placement schedule.

Please check out the changes and then I will finalize the document.

Paul

-----Original Message-----
From: dickerson.dave@epamail.epa.gov [mailto:dickerson.dave@epamail.epa.gov]
Sent: Friday, May 07, 2010 10:24 AM
To: Schroeder, Paul R ERDC-EL-MS; Fredette, Thomas ERD; Hayter, Earl ERDC-CHL-MS; Anderson, Mark J Jr NAE; Iorio, Maryellen NAE
Subject: final comments on the NBH CAD cell model report

Hello - thanks to all involved with this effort. Looks to me like we have a very good product. My relatively few and minor comments are attached in blue text.

My one over-arching comment (repeated in the attachment) is this: the modeling assumes placement over three years, yet our cost estimates are now assuming only one or two years (depending on funding) to fill the cell. Can the report add a short discussion about but what the likely impact would be (i.e., higher or lower losses) if the cell is filled over a shorter time frame - i.e., one or two years?

Thanks again - Dave

p.s. - I'll look over the tables and figures early next week and get any comments on those to you as well)

(See attached file: lhcc.erdc.model.rep.finalreview.doc)

Lower Harbor CAD Report May 2010prs.doc

E-Mail #13

From:	"Schroeder, Paul R ERDC-EL-MS" <Paul.R.Schroeder@usace.army.mil>
To:	Dave Dickerson/R1/USEPA/US@EPA
Cc:	"Hayter, Earl ERDC-CHL-MS" <Earl.Hayter@usace.army.mil>, "Anderson, Mark J Jr NAE" <Mark.J.Anderson.Jr@usace.army.mil>, "Iorio, Maryellen NAE" <Maryellen.Iorio@usace.army.mil>, "Fredette, Thomas ERD" <Thomas.J.Fredette@usace.army.mil>
Date:	05/13/2010 12:33 AM
Subject:	RE: final comments on the NBH CAD cell model report

Here are some responses to your questions on the new section.

Paul

-----Original Message-----
From: dickerson.dave@epamail.epa.gov [mailto:dickerson.dave@epamail.epa.gov]
Sent: Tuesday, May 11, 2010 10:56 AM
To: Schroeder, Paul R ERDC-EL-MS
Cc: Hayter, Earl ERDC-CHL-MS; Anderson, Mark J Jr NAE; Iorio, Maryellen NAE; Fredette, Thomas ERD
Subject: RE: final comments on the NBH CAD cell model report

Paul -   the draft write-up on schedule implications looks good. Just a few comments attached.

Thanks for the quick response!

Dave

(See attached file: lhcc.schedule.markup.510.doc)

From: "Schroeder, Paul R ERDC-EL-MS" <Paul.R.Schroeder@usace.army.mil>

To: Dave Dickerson/R1/USEPA/US@EPA

Cc: "Hayter, Earl ERDC-CHL-MS" <Earl.Hayter@usace.army.mil>, "Anderson, Mark J Jr NAE"

<Mark.J.Anderson.Jr@usace.army.mil>, "Iorio, Maryellen NAE" <Maryellen.Iorio@usace.army.mil>, "Fredette, Thomas ERD" <Thomas.J.Fredette@usace.army.mil>

Date: 05/11/2010 10:05 AM

Subject: RE: final comments on the NBH CAD cell model report

Dave,

I added a small section at the end of Chapter 4 on the effects of scheduling. Any comments on it while we move forward with wrapping this up?

Paul

-----Original Message-----
From: dickerson.dave@epamail.epa.gov [mailto:dickerson.dave@epamail.epa.gov]
Sent: Mon 5/10/2010 1:39 PM
To: Schroeder, Paul R ERDC-EL-MS
Cc: Hayter, Earl ERDC-CHL-MS; Anderson, Mark J Jr NAE; Iorio, Maryellen NAE; Fredette, Thomas ERD
Subject: RE: final comments on the NBH CAD cell model report

Paul - thanks for the info. Just to confirm, go ahead and add a short discussion on the effects of scheduling. But I think we'll keep potential use of AC out of the model report and just continue to consider it as a potential management option/belt and suspenders kind of thing.

Dave

From: "Schroeder, Paul R ERDC-EL-MS" <Paul.R.Schroeder@usace.army.mil>

To: Dave Dickerson/R1/USEPA/US@EPA, "Fredette, Thomas ERD" <Thomas.J.Fredette@usace.army.mil>, "Hayter, Earl ERDC-CHL-MS" <Earl.Hayter@usace.army.mil>, "Anderson, Mark J Jr NAE" <Mark.J.Anderson.Jr@usace.army.mil>, "Iorio, Maryellen NAE" <Maryellen.Iorio@usace.army.mil>

Date: 05/07/2010 11:55 PM

Subject: RE: final comments on the NBH CAD cell model report

Dave,

I can add a short discussion on effects of scheduling. The gist of the potential effects are described in principle. Since the water in the CAD approaches the sediment pore water quality in about 50 loads, it will do little in terms of the during placement losses. However, it will greatly reduce the losses between placement years. The bigger concern that needs to be addressed in the change in the size of the CAD cell required. With the reduction in placement time, there is a corresponding reduction in the time for consolidation of the dredged material. Therefore, the quantity of consolidation which was about 10 ft prior to capping could be reduced to about 5.5 ft if disposed in one year, increasing the size needed to perhaps 700 ft on a side instead of 650 ft.

Do you want a small section on controls in the main text and conclusions (regarding application of carbon and silt curtains)? I believe that we had deleted the content on activated carbon because we did not present it in the main body of the text. Use of activated carbon in this manner is somewhat experimental. The only application of this nature has been the broadcasting of PAC in a CDF to control volatilization. GAC could also be used and it will settle faster with less loss of AC from the CAD cell, but with potentially less stripping of PCBs from the water column within the CAD cell. The settled AC would serve to also strip the PCBs from the pore water being expelled from the settled dredged material. Other delivery systems such as Sedimite could deliver AC to the dredged material surface in the CAD cell but it would not provide any control for the existing contamination in the water column after placement.

Silt curtains with activated carbon could provide controls on PCB losses during placement.

The need for controls is probably questionable considering how small the loss is likely to be in comparison to the losses that are likely to be

occurring
at the dredging site.

Paul

-----Original Message-----
From: dickerson.dave@epamail.epa.gov [
mailto:dickerson.dave@epamail.epa.gov]
Sent: Friday, May 07, 2010 10:24 AM
To: Schroeder, Paul R ERDC-EL-MS; Fredette, Thomas ERD; Hayter, Earl
ERDC-CHL-MS; Anderson, Mark J Jr NAE; Iorio, Maryellen NAE
Subject: final comments on the NBH CAD cell model report

Hello - thanks to all involved with this effort. Looks to me like we have a very good product. My relatively few and minor comments are attached in blue text.

My one over-arching comment (repeated in the attachment) is this: the modeling assumes placement over three years, yet our cost estimates are now assuming only one or two years (depending on funding) to fill the cell. Can the report add a short discussion about but what the likely impact would be (i.e., higher or lower losses) if the cell is filled over a shorter time frame - i.e., one or two years?

Thanks again - Dave

p.s. - I'll look over the tables and figures early next week and get any comments on those to you as well)

(See attached file: lhcc.erdc.model.rep.finalreview.doc)

[attachment "Lower Harbor CAD Report May 2010prs.doc" deleted by Dave Dickerson/R1/USEPA/US]

lhcc schedule markup 510prs.doc

E-Mail #14

From:	"Schroeder, Paul R ERDC-EL-MS" <Paul.R.Schroeder@usace.army.mil>
To:	Dave Dickerson/R1/USEPA/US@EPA
Cc:	"Hayter, Earl ERDC-CHL-MS" <Earl.Hayter@usace.army.mil>, "Anderson, Mark J Jr NAE" <Mark.J.Anderson.Jr@usace.army.mil>, "Iorio, Maryellen NAE" <Maryellen.Iorio@usace.army.mil>, "Fredette, Thomas ERD" <Thomas.J.Fredette@usace.army.mil>
Date:	05/11/2010 10:05 AM
Subject:	RE: final comments on the NBH CAD cell model report

Dave,

I added a small section at the end of Chapter 4 on the effects of scheduling. Any comments on it while we move

forward with wrapping this up?

Paul

-----Original Message-----
From: dickerson.dave@epamail.epa.gov [mailto:dickerson.dave@epamail.epa.gov]
Sent: Mon 5/10/2010 1:39 PM
To: Schroeder, Paul R ERDC-EL-MS
Cc: Hayter, Earl ERDC-CHL-MS; Anderson, Mark J Jr NAE; Iorio, Maryellen NAE; Fredette, Thomas ERD
Subject: RE: final comments on the NBH CAD cell model report

Paul - thanks for the info. Just to confirm, go ahead and add a short discussion on the effects of scheduling. But I think we'll keep potential use of AC out of the model report and just continue to consider it as a potential management option/belt and suspenders kind of thing.

Dave

From: "Schroeder, Paul R ERDC-EL-MS" <Paul.R.Schroeder@usace.army.mil>

To: Dave Dickerson/R1/USEPA/US@EPA, "Fredette, Thomas ERD" <Thomas.J.Fredette@usace.army.mil>, "Hayter, Earl ERDC-CHL-MS" <Earl.Hayter@usace.army.mil>, "Anderson, Mark J Jr NAE" <Mark.J.Anderson.Jr@usace.army.mil>, "Iorio, Maryellen NAE" <Maryellen.Iorio@usace.army.mil>

Date: 05/07/2010 11:55 PM

Subject: RE: final comments on the NBH CAD cell model report

Dave,

I can add a short discussion on effects of scheduling. The gist of the potential effects are described in principle. Since the water in the CAD approaches the sediment pore water quality in about 50 loads, it will do little in terms of the during placement losses. However, it will greatly reduce the losses between placement years. The bigger concern that needs to be addressed in the change in the size of the CAD cell required. With the reduction in placement time, there is a corresponding reduction in the time for consolidation of the dredged material. Therefore, the quantity of consolidation which was about 10 ft prior to capping could be reduced to

about 5.5 ft if disposed in one year, increasing the size needed to perhaps
700 ft on a side instead of 650 ft.

Do you want a small section on controls in the main text and conclusions (regarding application of carbon and silt curtains)? I believe that we had
deleted the content on activated carbon because we did not present it in the
main body of the text. Use of activated carbon in this manner is somewhat
experimental. The only application of this nature has been the broadcasting
of PAC in a CDF to control volatilization. GAC could also be used and it
will settle faster with less loss of AC from the CAD cell, but with
potentially less stripping of PCBs from the water column within the CAD cell.
The settled AC would serve to also strip the PCBs from the pore water being
expelled from the settled dredged material. Other delivery systems such as
Sedimite could deliver AC to the dredged material surface in the CAD cell but
it would not provide any control for the existing contamination in the water
column after placement.

Silt curtains with activated carbon could provide controls on PCB losses during placement.

The need for controls is probably questionable considering how small the loss
is likely to be in comparison to the losses that are likely to be occurring
at the dredging site.

Paul

-----Original Message-----
From: dickerson.dave@epamail.epa.gov [mailto:dickerson.dave@epamail.epa.gov]
Sent: Friday, May 07, 2010 10:24 AM
To: Schroeder, Paul R ERDC-EL-MS; Fredette, Thomas ERD; Hayter, Earl ERDC-CHL-MS; Anderson, Mark J Jr NAE; Iorio, Maryellen NAE
Subject: final comments on the NBH CAD cell model report

Hello - thanks to all involved with this effort. Looks to me like we have a very good product. My relatively few and minor comments are attached in blue text.

My one over-arching comment (repeated in the attachment) is this: the modeling assumes placement over three years, yet our cost estimates are

now assuming only one or two years (depending on funding) to fill the cell. Can the report add a short discussion about but what the likely impact would be (i.e., higher or lower losses) if the cell is filled over a shorter time frame - i.e., one or two years?

Thanks again - Dave

p.s. - I'll look over the tables and figures early next week and get any comments on those to you as well)

(See attached file: lhcc.erdc.model.rep.finalreview.doc)

Lower Harbor CAD Report May 2010prs.doc

E-Mail #15

From:	"Schroeder, Paul R ERDC-EL-MS" <Paul.R.Schroeder@usace.army.mil>
To:	"Anderson, Mark J Jr NAE" <Mark.J.Anderson.Jr@usace.army.mil>, Dave Dickerson/R1/USEPA/US@EPA
Cc:	"Fredette, Thomas ERD" <Thomas.J.Fredette@usace.army.mil>
Date:	04/28/2010 10:09 AM
Subject:	RE: FW: Revised Draft New Bedford Harbor Lower CAD Cell Report

Dave and Mark,

Here are the Word files for the text and tables.

Paul

-----Original Message-----
From: Anderson, Mark J Jr NAE
Sent: Wednesday, April 28, 2010 6:33 AM
To: Schroeder, Paul R ERDC-EL-MS
Cc: Fredette, Thomas ERD
Subject: FW: FW: Revised Draft New Bedford Harbor Lower CAD Cell Report

Paul

Please see Dave's email below. Any chance he can get the Word version for his review of the text?

Thanks
Mark

Mark J. Anderson, Jr., PMP
Engineering Technical Lead
Geo-Environmental Branch

US Army Corps of Engineers
New England District (CENAE-EP-G)
696 Virginia Rd.

Concord, MA 01742

p: 978-318-8072
c: 978-394-2940
mark.j.anderson.jr@usace.army.mil

-----Original Message-----
From: dickerson.dave@epamail.epa.gov [mailto:dickerson.dave@epamail.epa.gov]
Sent: Tuesday, April 27, 2010 6:08 PM
To: Anderson, Mark J Jr NAE
Cc: Fredette, Thomas ERD
Subject: Re: FW: Revised Draft New Bedford Harbor Lower CAD Cell Report

Mark - one other thing. It would be more efficient for me to review this revision if I could see a Word file with the changes "tracked". Is there one available? Plus, in skimming thru the Conclusions on pp.5-6 it appears some hopefully minor editing is still required, so having at least the Word file (even if not in track changes) will make this process smoother.

Its nice to see the improvements from the hydrodynamic modeling added in.

Thanks - Dave

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| From: |
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  |"Anderson, Mark J Jr NAE" <Mark.J.Anderson.Jr@usace.army.mil>
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| To: |
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  |Dave Dickerson/R1/USEPA/US@EPA
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| Cc: |
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  |"Beaudoin, Maurice NAE" <Maurice.Beaudoin@usace.army.mil>, "L'Heureux,
Paul G NAE" <Paul.G.L'Heureux@usace.army.mil>, "Iorio, Maryellen |
  |NAE" <Maryellen.Iorio@usace.army.mil>, "Fredette, Thomas ERD"
<Thomas.J.Fredette@usace.army.mil> |

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  |FW: Revised Draft New Bedford Harbor Lower CAD Cell Report
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Da <<Lower Harbor CAD Report April 2010 Draft.pdf>> ve

Attached, please find the revised Draft New Bedford Lower Harbor CAD Cell
Modeling Report from ERDC.

At your convenience, please take a look at the document and let me know if
there are any final edits/comments. As soon as we have any final edits, Paul
and his team can wrap this up and get the final product back to you --
hopefully well in advance of your 19 May deadline.

I'm around if you need to discuss anything.

Thanks
Mark

Mark J. Anderson, Jr., PMP
Engineering Technical Lead
Geo-Environmental Branch

US Army Corps of Engineers
New England District (CENAE-EP-G)
696 Virginia Rd.
Concord, MA 01742

p: 978-318-8072
c: 978-394-2940
mark.j.anderson.jr@usace.army.mil

-----Original Message-----

From: Schroeder, Paul R ERDC-EL-MS
Sent: Saturday, April 24, 2010 3:56 AM
To: Anderson, Mark J Jr NAE; Fredette, Thomas ERD; Ruiz, Carlos E ERDC-EL-MS;
Hayter, Earl ERDC-CHL-MS
Subject: Revised Draft New Bedford Harbor Lower CAD Cell Report

Mark,

I am attaching our revised Draft New Bedford Harbor Lower CAD Cell Report
in which we have addressed all of the comments that we have received from
Dave Dickerson and others. I have added the higher resolution hydrodynamic
modeling and incorporated the results of the hydrodynamic modeling into the
loss predictions as increased turbulent diffusion. The loss predictions
increased by about 30 to 40%. We also extended the cap modeling out to 5000
years to quantify contaminant breakthrough. The revisions were much more
extensive than anticipated due to the findings of the hydrodynamic modeling.

Please contact me or other members of my team if you have any questions.

Paul

[attachment "Lower Harbor CAD Report April 2010 Draft.pdf" deleted by
Dave Dickerson/R1/USEPA/US]


Tables April 2010.doc

Lower Harbor CAD Report April 2010 Draft.doc

E-Mail #16

From:	"Dragos, Paul M" <dragosp@BATTELLE.ORG>
To:	"Leitch, Robert A NAE" <Robert.A.Leitch@usace.army.mil>, Dave Dickerson/R1/USEPA/US@EPA, "Mitkevicius, K C NAE" <K.C.Mitkevicius@usace.army.mil>, "Mackay, Joseph B NAE" <Joseph.B.Mackay@usace.army.mil>, "L'Heureux, Paul G NAE" <Paul.G.L'Heureux@usace.army.mil>, ElaineT Stanley/R1/USEPA/US@EPA
Cc:	"Dahlen, Deirdre T" <DahlenD@BATTELLE.ORG>, "Boyle, Jeanine" <boylej@BATTELLE.ORG>
Date:	05/21/2009 05:37 PM
Subject:	Preliminary Plume Tracking Results

Attached are preliminary turbidity results measured by ADCP for the disposal event 4/14/2009. Shown is the plume observed inside the CAD cell. The turbidity is uncalibrated.

Paul

Paul Dragos
Senior Research Scientist
Battelle
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Duxbury, MA 02332
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(614) 458-6880 (fax)
dragosp@battelle.org

Turbidity Inside the CAD Cell.doc